



A.A County Potential IMPs - Site 36

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 1 -- Catchment Information**

Subwatershed: Unnamed Tributary

Location of Catchment Centroid on ADC Map: Year: 2000 Page: 17 Grid: J8

State Plane Coordinates of Outfall Location: X: 1398264 Y: 482053

Closest Road Intersection to Outfall: Priest Bridge Drive and Espey Court

Outfall SDI ID or Outfall Description: unknown

Objective: Demonstration / Impairment(s) (Sheet 1) _____

Drainage Area (ac): 6.0 Impervious Area (ac): 0.8

Percent Impervious: 13% Soil Recharge Factor (S): 0.38

WQ_v (required): 0.09 Re_v (required): 0.03

Predominant Land Use: commercial Mean Depth to Ground Water: unknown

Sanitary System: Septic Municipal Sewer Water Supply: On Site Well Public Water

Storm Drainage System Within Catchment

Piped: 100% Open Channels: 0%

Area Drained by System: 100%

Location in Catchment: Headwaters Middle Lower All

Open Channel Lining- Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

Existing IMP(s) / BMP(s)

SDI ID: Unknown Type (number from Sheets 4 & 5): 13 Age: _____

Closest Road Intersection to IMP / BMP: Priest Bridge Road and Espey Court

Catchment Area Treated (ac) : _____ Percentage Catchment Treated: _____

WQ_v Provided: YES NO Re_v Provided: YES NO C_p Provided: YES NO

SDI ID: _____ Type (number from Sheets 4 & 5): _____ Age: _____

Closest Road Intersection to IMP / BMP: _____

Catchment Area Treated (ac) : _____ Percentage Catchment Treated: _____

WQ_v Provided: YES NO Re_v Provided: YES NO C_p Provided: YES NO

SDI ID: _____ Type (number from Sheets 4 & 5): _____ Age: _____

Closest Road Intersection to IMP / BMP: _____

Catchment Area Treated (ac) : _____ Percentage Catchment Treated: _____

WQ_v Provided: YES NO Re_v Provided: YES NO C_p Provided: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 1 -- Catchment Information (concluded)**

CATCHMENT SUMMARY			
WQ _v (provided):	<u>0.024</u>	Re _v (provided) :	<u>0.024</u>
Area Treated (ac):	<u>0.81</u>	Impervious Area Treated (ac):	<u>0.65</u>
Area Treated (%):	<u>14%</u>	Impervious Area Treated (%):	<u>81%</u>

Comments The storm water management treats about three quarters of the property, which includes the roof. The drainage area of the facility cannot be determined because the storm drainage system is not known.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information**

Site Name: _____ Address: 2130 Priest Bridge Drive

Site Owner: _____

State Plane Coordinates of Site Centroid: X: 1398409 Y: 481682 Date: 5/28/03

Personnel: PM Weather: cloudy, 70F deg

Area (ac): 6 Impervious Area (ac): 0.8

Percent Impervious: 14% Soil Recharge Factor (S): 0.38

WQ_v (required): 0.09 Re_v (required): 0.03

Property Area (ac): 6.4 Property Area Included in Site: 93%

Amount of Catchment Occupied by Site: 100%

Storm Drainage System Within Site

Piped: 100% Open Channels: 0% Area Drained by System: 75%

Open Channel Lining - Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

Existing IMP(s) / BMP(s) (Identified on Page 1, FORM 1, Catchment Information)

SDI ID: Unknown Condition: Excellent Good Average Fair Poor

SDI ID: _____ Condition: Excellent Good Average Fair Poor

SDI ID: _____ Condition: Excellent Good Average Fair Poor

Site Information

Type of Pavement: Bituminous Concrete Gravel Grid Pavers Other _____

Pavement Condition: Excellent Good Average Fair Poor

Underdrains can be easily directed to existing storm drains or daylighted: YES NO

Gutter/Exterior Downspouts Present: YES NO

Roof Connected Directly to Storm Drain: YES NO

Roof Drains onto Impervious Surface: YES NO

Obvious Existing Drainage Problems: Extensive Moderate Average Limited None

Steep Slopes Present: Extensive Moderate Average Limited None

Existing Landscaping: Extensive Moderate Average Limited None

Mature / Specimen Trees: Extensive Moderate Average Limited None

Area Available for Aboveground BMPs: Extensive Moderate Average Limited None

Existing Cover of Potential Aboveground BMP Locations: Grass Landscaped Gravel Other Pervious
 Pavement Other Impervious

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information (concluded)**

Commercial / Institutional

Islands Present: YES NO

Curb Present Around Island: YES NO

Ground Level of Island Relative to Pavement: Above Equal Below

Island Landscaping: Impervious Bare Earth Gravel Grass Mulch Herbaceous Plants Shrubs
 Trees (<2 in. DBH) Trees (2 - 6 in. DBH) Trees (>6 in. DBH)

Trees have sufficient spacing to allow IMPs YES NO

Parking area that can be directed to potential treatment area with little grading: 40%

SITE SUMMARY

WQ_v (provided) : 0.024

Re_v (provided): 0.024

Area Treated (ac) : 0.81

Impervious Area Treated (ac): 0.65

Area Treated (%) : 14%

Impervious Area Treated (%) : 81%

Photographs

- | | |
|----------------|---|
| No. <u>205</u> | Description: <u>looking north to SWM riser</u> |
| No. <u>206</u> | Description: <u>looking east across SWM pond</u> |
| No. <u>207</u> | Description: <u>looking south along west side of property</u> |
| No. <u>208</u> | Description: <u>looking east along north side of property</u> |
| No. <u>209</u> | Description: <u>looking east along south side of property</u> |
| No. <u>210</u> | Description: <u>looking north along west side of property</u> |
| No. <u>211</u> | Description: <u>looking north along east side of property</u> |
| No. <u>212</u> | Description: <u>looking south along east side of property</u> |
| No. <u>213</u> | Description: <u>looking west along north side of property</u> |
| No. <u>214</u> | Description: <u>looking west along south side of property</u> |

Comments Inlet along east side of building cannot be retrofitted because they are not adjacent to curb. Pavement is too new to be replaced with grid pavers. There appears significant room to expand the existing SWM pond to the north and east.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 2 -- Site Information (concluded)**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 7

State Plane Coordinates of IMP / BMP Centroid: X: 1398366 Y: 481835

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: 0.35 ac 100%

Retrofit of Existing SWM BMP

SDI ID: _____

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY

WQ_v (provided): unknown Re_v (provided): 0.000

Area Treated (ac): 0.35 Impervious Area Treated (ac): 0.35

Photographs

No.	<u>216</u>	Description:	<u>front of building</u>
No.	<u>215</u>	Description:	<u>rear of building showing scuppers</u>
No.	<u> </u>	Description:	<u> </u>
No.	<u> </u>	Description:	<u> </u>
No.	<u> </u>	Description:	<u> </u>
No.	<u> </u>	Description:	<u> </u>
No.	<u> </u>	Description:	<u> </u>
No.	<u> </u>	Description:	<u> </u>

Comments Building is less than 2 years old and a green roof may not be appropriate at this time.
IMP size = 15,438 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1398244 Y: 481904

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: 0.11 ac 100%

Retrofit of Existing SWM BMP

SDI ID: _____

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY			
WQ _v (provided):	<u>0.008</u>	Re _v (provided):	<u>0.008</u>
Area Treated (ac):	<u>0.11</u>	Impervious Area Treated (ac):	<u>0.10</u>

Photographs

No. <u>217</u>	Description: <u>looking south</u>
No. <u>218</u>	Description: <u>looking east</u>
No. <u>219</u>	Description: <u>looking north</u>
No. _____	Description: _____

Comments A speed bump will be needed to direct flow. A water meter box precluded use of the area to the east. Additional IMP exists to the south but must cross under a concrete sidewalk with a pipe or a trench drain.
IMP size = 695 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1398304 Y: 481745

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: 0.35 ac 100%

Retrofit of Existing SWM BMP

SDI ID: _____

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY			
WQ _v (provided):	<u>0.016</u>	Re _v (provided):	<u>0.016</u>
Area Treated (ac):	<u>0.35</u>	Impervious Area Treated (ac):	<u>0.20</u>

Photographs

No. <u>222</u>	Description: <u>looking east</u>
No. <u>223</u>	Description: <u>looking north</u>
No. <u>224</u>	Description: <u>looking south</u>
No. _____	Description: _____

Comments The concrete sidewalk will need to be spanned with a pipe or concrete trench drain.
A speed bump will be needed to direct flow. A water meter box precluded use of the area to the east.
Additional IMP exists to the south but must cross under a concrete sidewalk with a pipe or a trench drain.
IMP size = 1,404 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 59

State Plane Coordinates of IMP / BMP Centroid: X: 1398301 Y: 481815

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: _____ ac 100%

Retrofit of Existing SWM BMP

SDI ID: _____

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY

WQ_v (provided): _____ Re_v (provided): _____

Area Treated (ac): _____ Impervious Area Treated (ac): _____

Photographs

No.	<u>220</u>	Description:	<u>looking south</u>
No.	<u>221</u>	Description:	<u>looking north</u>
No.	_____	Description:	_____
No.	_____	Description:	_____
No.	_____	Description:	_____
No.	_____	Description:	_____
No.	_____	Description:	_____
No.	_____	Description:	_____

Comments

IMP size = 8,814 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 52

State Plane Coordinates of IMP / BMP Centroid: X: 1398301 Y: 481815

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: _____ ac 100%

Retrofit of Existing SWM BMP

SDI ID: _____

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY

WQ_v (provided): _____

Re_v (provided): _____

Area Treated (ac): _____

Impervious Area Treated (ac): _____

Photographs

No. <u>220</u>	Description: <u>looking south</u>
No. <u>221</u>	Description: <u>looking north</u>
No. _____	Description: _____

Comments

IMP size = 8,814 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP SWM BMP Retrofit New SWM BMP Type (Sheets 4 & 5): 21

State Plane Coordinates of IMP / BMP Centroid: X: 1398261 Y: 482051

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): _____

Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private
 Other _____

Infrastructure / Structures / Buildings Impacted: YES NO

Limited Impact to Adjacent Properties: YES NO

Area Accessible for Construction: YES NO

Area Accessible for Maintenance: YES NO

Limited Permitting Issues: YES NO

Jurisdictional Wetlands Impacted: YES NO

Forest Retention Area Impacted: YES NO

Conservation Easement Impacted: YES NO

Utilities Present: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Utilities Impacted: None Natural Gas Electric Telephone Cable Water Sewer Other _____

Impacted Utilities: Above Gound Underground

Critical Area Impacted: YES NO

Mature / Specimen Trees Impacted: YES NO

Existing Landscaping Impacted: YES NO

Underdrain Needed: YES NO

Underdrains Can Discharge: YES NO

Soils are Suitable: YES NO

Ground Water Table Level Suitable: YES NO

Estimate IMP / BMP drainage area included on site: _____ ac 10%

Retrofit of Existing SWM BMP

SDI ID: unknown

Add Forebay: YES NO

Modify Outlet Structure: YES NO

Add Aquatic Bench: YES NO

Grade Bottom of Facility: YES NO

Plant Native Vegetation: YES NO

Provide Additional Storage Volume: YES NO

Excavation / Raise the Embankment: YES NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

IMP / BMP SUMMARY

WQ_v (provided): _____ Re_v (provided): _____

Area Treated (ac): _____ Impervious Area Treated (ac): _____

Photographs

No.	<u>225</u>	Description:	<u>riser and low-flow orifice</u>
No.	<u>226</u>	Description:	<u>looking north across pond</u>
No.	<u>227</u>	Description:	<u>looking east across pond</u>
No.	<u>228</u>	Description:	<u>looking south across pond</u>
No.	<u>229</u>	Description:	<u>looking west at embankment</u>
No.	_____	Description:	_____
No.	_____	Description:	_____
No.	_____	Description:	_____

Comments Additional storage capacity can be obtained by grading to the north and to the east.
Property and ownership must be confirmed. Pond could be sized to overcontrol because of absence
of SWM throughout the area. Sediment appears to be coming from the Patuxent Materials, Inc
facility - possibly from washing vehicles. Riser low-flow inlet is partially blocked. Riser is cracked and
concrete is flaking. Facility will need to be sized to current requirements and to meet dam regulations.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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